

LIST OF CLAIMS / AMENDMENTS

Claim 24 is allowed.

Please cancel claim 19 without prejudice.

Please amend claims 1, 10-11, 13, 15, 20, 22, and 25 as shown herein.

Claims 1-18 and 20-27 are pending and are listed following:

1. (currently amended) A method implemented at a server device, the method comprising:

gathering region data for displaying a region of a server desktop remotely on a client display, wherein the region data describe a shape and a position of the region;

gathering graphics data for the region, wherein the graphics data describe visual content of the region, and wherein the region data and the graphics data are gathered synchronously so as to maintain an association of the region data and the graphics data; ~~and~~

sending the region data and the graphics data to a client in a sequential order that represents the association between the region data and the graphics data such that the client can determine which graphics data and region data are related; and

in an event that bandwidth becomes too low to send the region data and the graphics data to the client, reducing the amount of data to send by gathering the region data and the graphics data for a larger region that encompasses the region and that requires less data to describe.

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2 **2. (original)** The method as recited in claim 1, wherein the region
3 data and the graphics data are gathered in a single display driver.

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5 **3. (original)** The method as recited in claim 2, wherein the region
6 data and the graphics data are gathered and stored in a format of a remoting
7 protocol.

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9 **4. (original)** The method as recited in claim 3, wherein the region
10 data is synchronously gathered by a display driver-level window object created to
11 contain the shape and position information.

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13 **5. (original)** The method as recited in claim 3, wherein the graphics
14 data is synchronously gathered by the display driver.

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16 **6. (previously presented)** The method as recited in claim 5,
17 wherein the display driver synchronously gathers the graphics data by gathering
18 drawing commands issued to a graphics device interface subsystem of an
19 operating system of the server.

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21 **7. (previously presented)** The method as recited in claim 1,
22 wherein the region data and the graphics data is sent to the client in the sequential
23 order such that the region data precedes the graphics data.
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1 **8. (original)** The method as recited in claim 7, further comprising
2 sequencing the region data to precede the graphics data using rules of a remoting
3 protocol.

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5 **9. (original)** The method as recited in claim 8, further comprising
6 receiving the region data and the graphics data for display on a client and
7 displaying the graphics data according to the preceding region data.

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9 **10. (currently amended)** The method as recited in claim 1,
10 wherein in the event that the bandwidth becomes ~~response to a bandwidth for the~~
11 ~~sending becoming~~ too low to send the region data and the graphics data, reducing
12 the amount of data to send by sending no region data and sending graphics data for
13 the entire server desktop.

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15 **11. (currently amended)** The method as recited in claim 1,
16 wherein in the event that the bandwidth becomes ~~response to a bandwidth for the~~
17 ~~sending becoming~~ too low to send the region data and the graphics data, reducing
18 the amount of data to send by sending region data for a subset of the region and by
19 sending graphics data for the subset.

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21 **12. (original)** The method as recited in claim 11, wherein the subset
22 has a geometry that requires less region data to describe.
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1 **13. (currently amended)** The method as recited in claim 1,
2 ~~wherein in response to a bandwidth for the sending becoming too low to send the~~
3 ~~region data and the graphics data, reducing the amount of data to send by~~
4 ~~surrounding the region with a larger region that requires less data to describe and~~
5 further comprising enlarging the visual content of the region to fit the larger region
6 when reducing the amount of data to send.

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8 **14. (original)** The method as recited in claim 1, further comprising:
9 receiving the region data and the graphics data; and
10 displaying the graphics data as graphics in a region of a client desktop
11 described by the region data.

1 **15. (currently amended)** A remoting synchronization engine,
2 comprising:

3 a region data gathering module to gather region data describing a region of
4 a display desktop of a server to be remotely displayed on a client, wherein the
5 region data describe a shape and a desktop position of the region;

6 a graphics data gathering module to gather graphics data, wherein the
7 graphics data describe a visual content of the region, and wherein the region data
8 and the graphics data are gathered synchronously so as to maintain an association
9 of the region data and the graphics data;

10 a display driver at the server to collect the region data and the graphics data
11 while maintaining the association between the region data and the graphics data;
12 and

13 a data output scheduler to send the region data and the graphics data to the
14 client in a sequence which represents the association between the region data and
15 the graphics data, and in an event that bandwidth becomes too low to send the
16 region data and the graphics data to the client, reducing the amount of data to send
17 by gathering the region data and the graphics data for a larger region that
18 encompasses the region and that requires less data to describe.

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20 **16. (previously presented)** The remoting synchronization engine as
21 recited in claim 15, wherein the region data precedes the graphics data in the
22 sequence which represents the association between the region data and the
23 graphics data.
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1 **17. (original)** The remoting synchronization engine as recited in
2 claim 16, further comprising a bandwidth compensator to maintain security with
3 respect to the synchronized region data and the synchronized graphics data during
4 a condition of low bandwidth.

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6 **18. (original)** The remoting synchronization engine as recited in
7 claim 15, further comprising a data gathering scheduler to schedule synchronous
8 gathering of region data and graphics data synchronized to the region data.

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10 **19. (canceled)**
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1 **20. (currently amended)** A synchronized remoting system,
2 comprising:

3 a means for producing visual content at a server to be remotely displayed
4 on a client;

5 a means for designating a visual region of the visual content;

6 a means for gathering region data describing a geometry of the visual
7 region;

8 a means for gathering graphics data describing the visual content in the
9 visual region, wherein the graphics data is gathered synchronously with the region
10 data so as to maintain an association of the region data and the graphics data; ~~and~~

11 a means for sending the region data and the graphics data from the server to
12 the client in a sequential order which represents an association between the region
13 data and the graphics data, wherein region data in synchronicity with particular
14 graphics data precedes the particular graphics data; and

15 in an event that bandwidth becomes too low to send the region data and the
16 graphics data to the client, reducing the amount of data to send by gathering the
17 region data and the graphics data for a larger region that encompasses the visual
18 region and that requires less data to describe.

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20 **21. (previously presented)** The synchronized remoting system as
21 recited in claim 20, further comprising:

22 a means for receiving the region data and the graphics data at the client; and

23 a means for displaying the graphics data as graphics in a region of a client
24 desktop described by the region data.
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2 **22. (currently amended)** A method, comprising:
3 transmitting region data describing geometry of a visual region to be
4 remotely displayed, wherein the region data recurs at regular intervals in a data
5 stream to update the geometry of the visual region; ~~and~~
6 transmitting graphics data describing visual content of the visual region,
7 wherein the graphics data recurs at the regular intervals to update the visual
8 content and wherein the region data of each regular interval precedes the graphics
9 data of the corresponding regular interval in the data stream in a sequential order
10 which represents an association between the region data and the graphics data; and
11 in an event that bandwidth becomes too low to transmit the region data and
12 the graphics data, reducing the amount of data to transmit by gathering the region
13 data and the graphics data for a larger region that encompasses the visual region
14 and that requires less data to describe.

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16 **23. (previously presented)** The method as recited in claim 22,
17 wherein the region data and the graphics data for each regular interval are gathered
18 synchronously so as to maintain an association of the region data and the graphics
19 data.
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1 **24. (previously presented)** A method, comprising:

2 gathering region data and graphics data synchronously so as to maintain an

3 association of the region data and the graphics data from a visual region of a

4 computing server display to be remotely displayed on a client display;

5 if bandwidth is sufficient for sending the region data and the graphics data

6 to the client, then sending the region data and the graphics data to the client,

7 wherein a region datum in synchronicity with a graphics datum is sent before the

8 graphics datum in a sequential order that represents the association of the region

9 data and the graphics data;

10 if bandwidth is not sufficient for sending the region data and the graphics

11 data to the client, then

12 (a) if the client owns an entirety of information displayable on

13 the computing server display, then sending only graphics data describing

14 the entire visual content of the computing server display; but

15 (b) if the client does not own an entirety of information

16 displayable on the computing server display, then

17 (i) if visual content of the visual region can be truncated,

18 then selecting a smaller visual region inscribed in the visual region

19 and sending synchronized region data and synchronized graphics

20 data associated with the smaller visual region[[]]; but

21 (ii) if the visual content of the visual region cannot be

22 truncated, then selecting a larger visual region circumscribing the

23 visual region, sending synchronized region data and synchronized

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1 graphics data associated with the larger visual region, and resizing
2 visual content of the visual region to fit the larger visual region.
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4 **25. (currently amended)** One or more computing device readable
5 media containing instructions that are executable by a computing device to
6 perform actions comprising:

7 gathering region data for displaying a visual region of a server desktop
8 remotely on a client display, wherein the region data describe a shape and a
9 position of the visual region;

10 gathering graphics data for the visual region, wherein the graphics data
11 describe a visual content of the visual region, and wherein the region data and the
12 graphics data are gathered synchronously so as to maintain an association of the
13 region data and the graphics data; and

14 sending the region data and the graphics data to a client in a sequential
15 order that represents the association between the region data and the graphics data
16 such that the client can determine which graphics data and region data are related;
17 and

18 in an event that bandwidth becomes too low to send the region data and the
19 graphics data to the client, reducing the amount of data to send by gathering the
20 region data and the graphics data for a larger region that encompasses the visual
21 region and that requires less data to describe.
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1 **26. (previously presented)** The one or more computing device
2 readable media as recited in claim 25, wherein maintaining the association further
3 comprises preceding graphics data to be sent to the client with the region data
4 synchronized to the graphics data.

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6 **27. (original)** The one or more computing device readable media as
7 recited in claim 25, wherein the region data and the graphics data are
8 synchronously gathered into one display driver.
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